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Indiana Public Retirement System

Judges' Retirement System

Actuarial Valuation as of
June 30, 2013



December 17, 2013

Board of Trustees
Indiana Public Retirement System
1 North Capitol, Suite 001
Indianapolis, IN 46204

Re: Certification of the Actuarial Valuations of the Indiana Public Retirement System as of as of June 30, 2013

Dear Board of Trustees:

Actuarial valuations are performed annually for the Indiana Public Retirement System ("INPRS") defined benefit pension plans ("Plans"). The results of the latest actuarial valuations for all plans other than the Teachers' Retirement Fund were prepared as of June 30, 2013 and are presented in individual valuation reports pursuant to the engagement letter between INPRS and PricewaterhouseCoopers LLP ("PwC"), dated June 7, 2010. The reports are intended to provide the Board of Trustees ("Board") with information on the funded status of the Plans, development of the contribution rates, and certain financial statement disclosure information.

Under Indiana statutes, employer contribution rates and amounts, as applicable, are adopted annually for each Plan by the Board. The contributions are actuarially determined based on the funding policy, actuarial assumptions, and actuarial methods adopted by the Board. Contributions determined by the actuarial valuation become effective either twelve or eighteen months after the valuation date, depending on the applicable employer. Therefore, contribution rates determined by the June 30, 2013 actuarial valuation and adopted by the Board will become effective on either July 1, 2014 or January 1, 2015. If new legislation is enacted between the valuation date and the date the contributions become effective, the Board may adjust the recommended contributions before adopting them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

Financing Objectives and Funding Policy

In setting contribution levels, the Board's principal objectives have been:

- To set contributions such that the unfunded actuarial accrued liability ("UAAL") will be amortized over a period not greater than 30 years.
- To set contributions such that they remain relatively level over time.

To accomplish this, the Board's funding policy requires that employer contributions be equal to the sum of the employer normal cost (which pays the current year cost of benefits accruing) and an amortization of the UAAL in equal installments.

Progress Toward Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a Plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches 100%. The combined funded ratio for all Plans (excluding the Teachers' Retirement Fund) increased by 4.2% from the preceding year to 83.4%, primarily due to delayed recognition of prior asset gains from fiscal 2010 and 2011 in the Actuarial Value of Assets and additional contributions made to certain plans pursuant to 2012 House Bill 1376.

Benefit Provisions

The benefit provisions reflected in the valuation reports are those which were in effect at June 30, 2013, as set forth in the related Indiana statutes. Material changes in benefit provisions since the 2012 valuation include the decision to modify ASA annuitizations for Public Employees' Retirement Fund (PERF) starting October 1, 2014 and amending several features of Prosecuting Attorneys' Retirement Fund to be similar to Judges' Retirement System pursuant to 2013 House Bill 1057. There were no other material changes in benefit provisions since the 2012 valuations.



Assets and Member Data

The valuations were based on asset values of the trust funds and member census data as of June 30, 2013. All asset information and member data were provided by INPRS. While certain checks for reasonableness were performed, the data was used unaudited. The accuracy of the results presented in the reports is dependent upon the accuracy and completeness of the underlying asset and census information.

Actuarial Assumptions and Methods

The majority of the actuarial assumptions used in the June 30, 2013 valuations were adopted by the Board pursuant to the Experience Studies completed in September 2011, which reflected the experience period from July 1, 2005 through June 30, 2010, and were first used in the June 30, 2011 valuation. The actuarial assumptions for interest rate and mortality were updated for the June 30, 2012 valuation. Minor assumptions were updated for the June 30, 2013 valuation including the interest rate on member account balances and assumptions for Prosecuting Attorneys' Retirement Fund due to plan changes. The actuarial assumptions and methods are summarized in the Actuarial Assumptions and Methods section of each valuation report. We believe the actuarial assumptions and methods are reasonable for the purposes of the valuation reports and comply with the parameters set forth in Statements No. 25 and No. 27 of the Governmental Accounting Standards Board ("GASB"). Different assumptions and methods may be reasonable for other purposes. As such, the results presented in the valuation reports should only be relied upon for the intended purpose.

Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of each Plan administered by INPRS (other than the Teachers' Retirement Fund) as of June 30, 2013 based on the underlying census data, asset information and selected assumptions and methods.

This report contains the required accounting information to be included in the Comprehensive Annual Financial Report. This information has been prepared in accordance with our understanding of Governmental Accounting Standards No. 25 and No. 27 (as amended by No. 50). This report does not contain accounting information prepared in accordance with Governmental Accounting Standards No. 67 and No. 68, which will become effective for financial statements for fiscal years beginning after June 15, 2013 and June 15, 2014, respectively.

To the best of our knowledge this actuarial statement is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with our understanding of the requirements of Indiana state law. The undersigned actuaries are members of the Society of Actuaries and other professional organizations, including the American Academy of Actuaries, and meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States relating to pension plans. There is no relationship between the PwC practitioners involved in this engagement and INPRS that may impair our objectivity.

This document was not intended or written to be used, and it cannot be used, for the purpose of avoiding U.S. federal, state, or local tax penalties. This includes penalties that may apply if the transaction that is the subject of this document is found to lack economic substance or fails to satisfy any other similar rule of law. This document has been prepared pursuant to an engagement letter between INPRS and PwC, and is intended solely for the use and benefits of INPRS and not for reliance by any other person.

Respectfully submitted,

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TABLE OF CONTENTS

I. EXECUTIVE SUMMARY	1
II. FUNDING	
A. Development of Funded Status	7
B. Unfunded Actuarial Accrued Liability Reconciliation	8
C. Actuarial Accrued Liability Reconciliation	9
D. Reconciliation of Market Value of Assets	10
E. Reconciliation of Actuarial Value of Assets	11
F. Contributions	12
G. Unfunded Actuarial Accrued Liability Amortization Schedule	13
H. Approximate Annual Rate of Return for Year Ending June 30, 2013	14
I. Historical Investment Experience	14
K. Interest Rate Sensitivity	15
III. ACCOUNTING	
A. Assumptions and Methods Under GASB #25 and #27	16
B. Membership Data	16
C. Statement of Fiduciary Net Position	17
D. Statement of Changes in Fiduciary Net Position	18
E. Schedule of Funding Progress	19
F. Schedule of Employer Contributions	19
G. Development of Net Pension Obligation (NPO)	20
H. Three-Year Trend Information	20
I. Solvency Test	21
IV. CENSUS DATA	22
V. ACTUARIAL ASSUMPTIONS AND METHODS	31
VI. SUMMARY OF PLAN PROVISIONS	36
VII. DEFINITION OF TECHNICAL TERMS	41

SECTION I - EXECUTIVE SUMMARY

HIGHLIGHTS OF THE ACTUARY'S REPORT

This report presents the results of the actuarial valuation of the Judges' Retirement System ("JRS") and has been prepared to present the current funded status of the Plan, contribution requirements for fiscal year 2015 (July 1, 2014 through June 30, 2015), and certain financial statement disclosure information. The valuation was performed using census data for plan members as of June 30, 2013 provided by INPRS, asset information as of June 30, 2013 provided by INPRS, the actuarial assumptions and methods approved by the Board and summarized in Section V, and the plan provisions effective June 30, 2013 as summarized in Section VI.

Contributions

JRS is a State appropriated fund. All employer contributions are made by the State of Indiana. The anticipated annual required contribution for fiscal 2015 is \$19.0 million, compared to \$28.2 million for fiscal 2014. It is our understanding the State has budgeted contributions of \$20.9 million and \$21.0 million for fiscal 2014 and 2015, respectively.

Members of JRS contribute 6% of their compensation during their first 22 years of membership. If a JRS member terminates employment with less than 8 years of service, the accumulated contributions with interest can be withdrawn as a lump sum or the member may direct the JRS to make a direct rollover of the distribution amount. When a member becomes vested, the member's account balance may not be refunded and is instead combined with the employer contributions in order to fund the member's future retirement annuity benefit.

Funded Status

The funded status of JRS is measured by the funded ratio, which is the ratio of the assets available for benefits to a benefit liability measure for JRS. While there are several such measures that could be appropriately used, the benefit liability measure that ties most closely to your funding strategy is the Actuarial Accrued Liability ("AAL").

Using the Actuarial Value of Assets ("AVA"), an asset value that smoothes the market gains and losses over four (4) years, the JRS AAL funded ratio increased from 59.4% at June 30, 2012 to 84.1% at June 30, 2013. The increase is primarily due to an additional contribution of \$90.2 million made to the Plan pursuant to 2012 House Bill 1376 and the recognition of investment gains from prior years in the AVA development.

Investment Experience

The assets of JRS are commingled with the assets of other funds administered by INPRS. The overall INPRS return on the commingled funds was 6.0% during fiscal 2013. Based on the value of assets allocated to JRS as of the prior valuation date and contribution and benefit payment activity during the year, the allocation of returns to JRS represent a return of approximately 5.4% on market value and 8.0% on actuarial value. The return on actuarial value is different due to the smoothing of returns greater or less than expected returns over four years.

Cost-of-Living Adjustment

Benefits for retired members increase automatically based on the annual pay increase granted for the position the member held at the time of retirement. The annual cost-of-living assumption for the valuation is 4.0%, which is the same as the salary increase assumption for active members. A cost-of-living increase of 3.1% took effect on July 1, 2013.

SECTION I - EXECUTIVE SUMMARY

HIGHLIGHTS OF THE ACTUARY'S REPORT (CONTINUED)

Changes in Actuarial Assumptions

The interest crediting rate assumption on member contribution balances was increased from 0% to 3.5%.

There were no other assumption changes for the June 30, 2013 valuation.

Changes in Plan Provisions

It is our understanding that there were no changes to the Plan that impacted the pension benefits during the fiscal year.

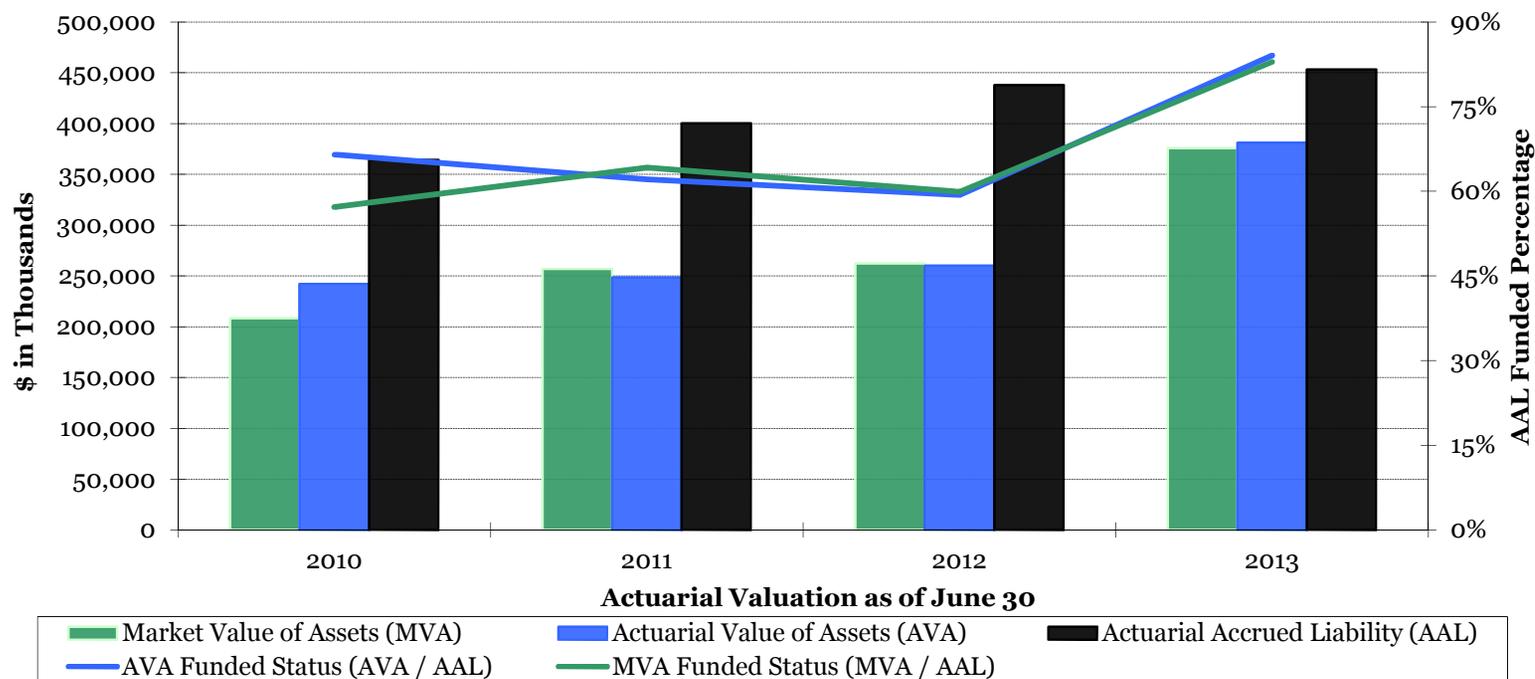
Changes in Actuarial Methods

There have been no changes in actuarial methods since the June 30, 2012 valuation.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY

JRS – 4 Year History of Funded Status



Actuarial Valuation as of June 30:	2010	2011	2012	2013¹
Actuarial Accrued Liability (AAL)	\$364,122.7	\$400,273.5	\$437,854.5	\$453,109.9
Actuarial Value of Assets (AVA)	242,142.8	248,623.3	260,096.4	381,239.9
Market Value of Assets (MVA)	208,395.2	256,985.8	262,325.7	375,752.6
Unfunded Liability (AAL - AVA)	121,979.9	151,650.2	177,758.1	71,870.0
AVA Funded Status (AVA / AAL)	66.5%	62.1%	59.4%	84.1%
MVA Funded Status (MVA / AAL)	57.2%	64.2%	59.9%	82.9%

¹ Includes \$90.2 million of additional contributions due to 2012 HB 1376 during fiscal 2013.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results ¹

<u>Valuation Date</u>	<u>June 30, 2010</u>	<u>June 30, 2011</u>	<u>June 30, 2012</u>	<u>June 30, 2013</u>
Development of Annual Required Contribution Amount:				
1. Anticipated Payroll	\$ 36,721,919	\$ 45,764,278	\$ 45,138,370	\$ 46,966,598
2. Normal Cost (Beginning of Year)				
a. Amount	\$ 11,567,716	\$ 15,281,754	\$ 16,084,590	\$ 15,301,638
b. Percentage of Payroll	31.50%	33.39%	35.64%	32.58%
3. Unfunded Actuarial Accrued Liability Annual Amortizations				
a. Amount	\$ 9,515,365	\$ 11,873,696	\$ 13,705,127	\$ 5,656,065
b. Percentage of Payroll	25.91%	25.95%	30.36%	12.04%
4. Expected Employee Contributions ²				
a. Amount	\$ 2,173,160	\$ 2,678,007	\$ 2,684,888	\$ 2,721,671
b. Percentage of Payroll	5.92%	5.85%	5.95%	5.79%
5. Annual Required Contribution Rate: (2)(b) + (3)(b) - (4)(b)	51.49%	53.49%	60.05%	38.83%
6. Estimated Annual Required Contribution Amount				
a. Fiscal Year Beginning	July 1, 2011	July 1, 2012	July 1, 2013	July 1, 2014
b. Anticipated Payroll: (1) x [(1 + 4.0%)]	\$ 38,190,796	\$ 47,594,849	\$ 46,943,905	\$ 48,845,262
c. Amount: (5) x (6)(b) ³	\$ 19,664,441	\$ 25,458,485	\$ 28,189,815	\$ 18,966,615
<u>Fiscal Year</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
State Appropriations ^{4,5}	\$ 18,896,172	\$ 111,415,160	\$ 20,894,732	\$ 21,020,000

¹ The contribution amounts shown were developed on a funding basis only and do not reflect accounting requirements.

² Only members with less than 22 years of service contribute to the plan. Anticipated payroll for active members with less than 22 years of service as of June 30, 2013 is \$45,361,176.

³ Since the fiscal year to which contributions apply begins one year after the valuation date, the Annual Required Contribution Amount is estimated by assuming payroll will increase 4.0% per year and then applying the Annual Required Contribution Rate computed at the valuation date.

⁴ JRS is a State appropriated fund. Employer contribution amounts are expected to be paid by the State of Indiana.

⁵ Includes an additional contribution in the amount of \$90,187,160 made to the Plan during fiscal 2013 pursuant to 2012 HB 1376.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results (Continued)

	<u>June 30, 2010</u>	<u>June 30, 2011</u>	<u>June 30, 2012</u>	<u>June 30, 2013</u>
Census Information				
Active				
Number	291	363	361	365
Average Age	55.0	54.3	54.9	54.6
Average Years of Service	9.5	8.3	8.9	8.8
Covered Payroll of Actives	\$ 36,721,919	\$ 45,764,278	\$ 45,138,370	\$ 46,966,598
Inactive - Vested				
Number	73	66	72	67
Average Age	60.7	61.0	61.1	61.7
Average Years of Service	18.4	18.1	18.6	18.5
Inactive - Non-Vested ¹				
Number	31	31	28	32
Retiree/Beneficiary/Disabled				
Number	298	310	311	321
Average Age	75.3	75.1	75.4	75.2
Annual Benefits Payable	\$ 15,389,828	\$ 16,787,212	\$ 17,027,599	\$ 18,474,014

¹ For June 30, 2013, inactive non-vested members entitled to a refund of their member contributions totaling \$590,200.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results (Continued)

	<u>June 30, 2010</u>	<u>June 30, 2011</u>	<u>June 30, 2012</u>	<u>June 30, 2013</u>
Actuarial Accrued Liability				
Member Contribution Balance	\$ 23,137,615	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096
Retiree/Beneficiary/Disabled	182,023,263	198,796,748	205,340,787	224,131,485
Active and Inactive	<u>158,961,853</u>	<u>177,117,795</u>	<u>204,814,117</u>	<u>199,918,312</u>
Total	\$ <u>364,122,731</u>	\$ <u>400,273,544</u>	\$ <u>437,854,459</u>	\$ <u>453,109,893</u>
Actuarial Value of Assets (AVA)				
Member Contribution Balance	\$ 23,137,615	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096
Retiree/Beneficiary/Disabled	182,023,263	198,796,748	205,340,787	224,131,485
Active and Inactive	<u>36,981,965</u>	<u>25,467,608</u>	<u>27,056,065</u>	<u>128,048,344</u>
Total	\$ <u>242,142,843</u>	\$ <u>248,623,357</u>	\$ <u>260,096,407</u>	\$ <u>381,239,925</u>
Market Value of Assets (MVA)				
Member Contribution Balance	\$ 23,137,615	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096
Retiree/Beneficiary/Disabled	182,023,263	198,796,748	205,340,787	224,131,485
Active and Inactive	<u>3,234,360</u>	<u>33,830,004</u>	<u>29,285,340</u>	<u>122,560,981</u>
Total	\$ <u>208,395,238</u>	\$ <u>256,985,753</u>	\$ <u>262,325,682</u>	\$ <u>375,752,562</u>
Unfunded Actuarial Accrued Liability: AAL - AVA				
Member Contribution Balance	\$ -	\$ -	\$ -	\$ -
Retiree/Beneficiary/Disabled	-	-	-	-
Active and Inactive	<u>121,979,888</u>	<u>151,650,187</u>	<u>177,758,052</u>	<u>71,869,968</u>
Total	\$ <u>121,979,888</u>	\$ <u>151,650,187</u>	\$ <u>177,758,052</u>	\$ <u>71,869,968</u>
Funded Percentage				
Member Contribution Balance	100.0%	100.0%	100.0%	100.0%
Retiree/Beneficiary/Disabled	100.0%	100.0%	100.0%	100.0%
Active and Inactive	<u>23.3%</u>	<u>14.4%</u>	<u>13.2%</u>	<u>64.1%</u>
Total	66.5%	62.1%	59.4%	84.1%
Summary of Assumptions				
Valuation Interest Rate	7.00%	7.0%	6.75%	6.75%
Salary Scale	4.0%	4.0%	4.0%	4.0%
Cost-of-Living Assumption	4.0%	4.0%	4.0%	4.0%

SECTION II - FUNDING

FUNDING

	<u>Page</u>
A. Development of Funded Status	7
B. Unfunded Actuarial Accrued Liability Reconciliation	8
C. Actuarial Accrued Liability Reconciliation	9
D. Reconciliation of Market Value of Assets	10
E. Reconciliation of Actuarial Value of Assets	11
F. Contributions	12
G. Unfunded Actuarial Accrued Liability Amortization Schedule	13
H. Approximate Annual Rate of Return for Year Ending June 30, 2013	14
I. Historical Investment Experience	14
K. Interest Rate Sensitivity	15

SECTION II - FUNDING

A. Development of Funded Status

	June 30, 2012	June 30, 2013
1. Actuarial Accrued Liability		
a. Member Contribution Account	\$ 27,699,555	\$ 29,060,096
b. Retirees, Beneficiaries, and Disableds	205,340,787	224,131,485
c. Actives and Inactives	204,814,117	199,918,312
d. Total: (1)(a) + (1)(b) + (1)(c)	\$ 437,854,459	\$ 453,109,893
2. Actuarial Value of Assets ¹		
a. Member Contribution Account	\$ 27,699,555	\$ 29,060,096
b. Retirees, Beneficiaries, and Disableds	205,340,787	224,131,485
c. Actives and Inactives	27,056,065	128,048,344
d. Total: (2)(a) + (2)(b) + (2)(c)	\$ 260,096,407	\$ 381,239,925
3. Unfunded Actuarial Accrued Liability ¹		
a. Member Contribution Account: (1)(a) - (2)(a)	\$ -	\$ -
b. Retirees, Beneficiaries, and Disableds: (1)(b) - (2)(b)	-	-
c. Actives and Inactives: (1)(c) - (2)(c)	177,758,052	71,869,968
d. Total: (1)(d) - (2)(d)	\$ 177,758,052	\$ 71,869,968
4. Funded Percentage ¹		
a. Member Contribution Account: (2)(a) / (1)(a)	100.0%	100.0%
b. Retirees, Beneficiaries, and Disableds: (2)(b) / (1)(b)	100.0%	100.0%
c. Actives and Inactives: (2)(c) / (1)(c)	13.2%	64.1%
d. Total: (2)(d) / (1)(d)	59.4%	84.1%

¹ In determining the funded percentage, the assets are allocated first to member contribution balances, then to the retiree/beneficiary/disabled liability, and then to the active/inactive liability.

SECTION II - FUNDING

B. Unfunded Actuarial Accrued Liability Reconciliation

	June 30, 2012	June 30, 2013
1. Unfunded Actuarial Accrued Liability, Prior Year	\$ 151,650,187	\$ 177,758,052
2. Unfunded Actuarial Accrued Liability (Gain) / Loss		
a. Actuarial Value of Assets Experience	\$ 17,654,755	\$ 6,315,459
b. Actuarial Accrued Liability Experience	707,955	(9,673,242)
c. Additional Liability Due to Cost-of-Living Adjustments	(7,143,624) ¹	(3,809,540) ³
d. Additional Liability Due to Changes in Actuarial Assumptions	16,978,081 ²	185,587 ⁴
e. Additional Liability Due to Changes in Plan Provisions	-	-
f. Total New Amortization Bases: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e)	\$ 28,197,207	\$ (6,981,736)
g. Reduction in Existing Bases Due to Prior Year Contributions, Net of Interest	(2,089,342)	(98,906,348) ⁵
h. Change in Unfunded Actuarial Accrued Liability: (2)(f) + (2)(g)	\$ 26,107,865	\$ (105,888,084)
3. Unfunded Actuarial Accrued Liability, Current Year: (1) + (2)(h)	\$ 177,758,052	\$ 71,869,968

¹ A Cost-of-Living Adjustment (COLA) of 2.2% was effective as of July 1, 2012, rather than the assumed COLA of 4.0%.

² Assumption changes include the change in discount rate from 7.0% to 6.75% and change in mortality table from the 2008 IRS Static Mortality projected five (5) years with Scale AA to the 2013 IRS Static Mortality projected five (5) years with Scale AA.

³ Cost-of-Living Adjustment (COLA) of 3.1% was effective July 1, 2013 rather than the assumed COLA of 4.0%.

⁴ The interest crediting rate assumption on member contribution balances was increased from 0% to 3.5%.

⁵ Includes a contribution of \$90,187,160 made to the Plan pursuant to 2012 HB 1376.

SECTION II - FUNDING

C. Actuarial Accrued Liability Reconciliation

1. June 30, 2012 Actuarial Accrued Liability	\$	437,854,459	
2. Normal Cost		16,084,590	
3. Actual Benefit Payments		17,579,537	
4. Interest of 6.75% on (1) + (2) - (3)/2		<u>30,047,576</u>	
5. Expected June 30, 2013 Actuarial Accrued Liability: (1) + (2) - (3) + (4)	\$	466,407,088	
		<u>Dollar Change</u>	<u>Percent Change</u>
		<u>in Liability</u>	<u>in Liability</u>
6. (Gain)/Loss Components			
a. Census	\$	(9,673,242)	(2.1%)
b. Cost-of-Living Adjustment ¹		(3,809,540)	(0.8%)
c. Assumption Changes ²		<u>185,587</u>	<u>0.0%</u>
d. Total: (6)(a) + (6)(b) + (6)(c)	\$	(13,297,195)	(2.9%)
7. Actual June 30, 2013 Actuarial Accrued Liability: (5) + (6)(d)	\$	453,109,893	

¹ A Cost-of-Living Adjustment (COLA) of 3.1% was effective as of July 1, 2013, rather than the assumed COLA of 4.0%.

² The interest crediting rate assumption on member contribution balances was increased from 0% to 3.5%.

SECTION II - FUNDING

D. Reconciliation of Market Value of Assets

	June 30, 2012	June 30, 2013
1. Market Value of Assets, Prior June 30	\$ 256,985,753	\$ 262,325,682
2. Receipts		
a. Employer Contributions	\$ 18,896,172	\$ 111,417,613
b. Member Contributions	2,467,769	2,631,374
c. Investment Income and Dividends Net of Fees	506,778	16,878,268
d. Security Lending Income Net of Fees	87,656	80,082
e. Transfers In	257,237	120,134
f. Miscellaneous Income	1,593	4,806
g. Total Receipts: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f)	\$ 22,217,205	\$ 131,132,277
3. Disbursements		
a. Benefits Paid During the Year	\$ 16,727,365	\$ 17,526,495
b. Refund of Contributions and Interest	18,685	53,042
c. Administrative and Project Expenses	131,226	125,860
d. Transfers Out	-	-
e. Miscellaneous Disbursements	-	-
f. Total Disbursements: (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e)	\$ 16,877,276	\$ 17,705,397
4. Market Value of Assets, Current June 30: (1) + (2)(g) - (3)(f)	\$ 262,325,682	\$ 375,752,562
5. Market Value of Assets Approximate Annual Rate of Return ¹	0.2%	5.4%

¹ Assumes cash flows occur at mid-year.

SECTION II - FUNDING

E. Reconciliation of Actuarial Value of Assets

1.	Market Value of Assets, June 30, 2012	\$	262,325,682
2.	Market Value of Assets, June 30, 2013		375,752,562
3.	Expected Earnings/Expenses		
a.	Expected Investment Earnings at 6.75% on June 30, 2012 Market Value		17,706,984
b.	Receipts with Expected Investment Earnings at 6.75% ¹		118,027,297
c.	Disbursements with Expected Investment Earnings at 6.75% ¹		18,172,846
4.	Expected Assets, June 30, 2013: (1) + (3)(a) + (3)(b) - (3)(c)	\$	379,887,117
5.	2012-2013 Gain/(Loss): (2) - (4)		(4,134,555)
6.	Smoothing of Gain/(Loss)		
	<u>Year</u>	<u>Gain/(Loss)</u>	<u>% Unrecognized</u>
a.	2012-2013	\$ (4,134,555)	75%
b.	2011-2012	\$ (17,696,480)	50%
c.	2010-2011	\$ 25,847,171	25%
7.	Preliminary Actuarial Value of Assets, June 30, 2013: (2) - (6)(a) - (6)(b) - (6)(c)	\$	381,239,925
8.	Corridor		
a.	120% of Market Value: 1.2 x (2)		450,903,074
b.	80% of Market Value: 0.8 x (2)		300,602,050
9.	Actuarial Value of Assets, June 30, 2013: (7), but not greater than (8)(a) or less than (8)(b)	\$	381,239,925
10.	Actuarial Value of Assets as a Percent of Market Value: (9) / (2)		101.5%
11.	Actuarial Value of Assets Approximate Annual Rate of Investment Return ¹		8.0%

¹ Assumes cash flows occur at mid-year.

SECTION II - FUNDING

F. Contributions

	June 30, 2012	June 30, 2013
Development of Annual Required Contribution:		
1. Anticipated Payroll	\$ 45,138,370	\$ 46,966,598
2. Normal Cost (Beginning of Year)		
a. Amount	\$ 16,084,590	\$ 15,301,638
b. Percentage of Payroll	35.64%	32.58%
3. Unfunded Actuarial Accrued Liability (UAAL) Annual Amortizations		
a. Amount	\$ 13,705,127	\$ 5,656,065
b. Percentage of Payroll	30.36%	12.04%
4. Expected Employee Contributions ¹		
a. Amount	\$ 2,684,888	\$ 2,721,671
b. Percentage of Payroll	5.95%	5.79%
5. Annual Required Contribution Rate: (2)(b) + (3)(b) - (4)(b)	60.05%	38.83%
6. Estimated Annual Required Contribution Amount		
a. Fiscal Year Beginning	July 1, 2013	July 1, 2014
b. Anticipated Payroll: (1) x [(1 + 4.0%)]	\$ 46,943,905	\$ 48,845,262
c. Amount: (5) x (6)(b) ²	\$ 28,189,815	\$ 18,966,615
Development of Funding Amount:		
7. Contribution received after June 30, 2012 pursuant to 2012 HB 1376	90,187,160	
8. UAAL Amortization Assuming HB 1376 Contribution is included in June 30, 2012 Assets		
a. Amount	6,692,263	
b. Percentage of Payroll	14.82%	
9. Funding Rate Reflecting HB 1376: (2)(b) - (4)(b) + (8)(b)	44.51%	
10. Estimated Funding Amount Reflecting HB 1376: (9) x (6)(b)	20,894,732	
Approved Funding Amount: ³	\$ 20,894,732	\$ 21,020,000
Expected Percentage of Annual Required Contribution Contributed: (10) / (6)(c)	74.12%	110.83%

¹ Only members with less than 22 years of service contribute to the plan. Anticipated payroll for active members with less than 22 years of service as of June 30, 2013 is \$45,361,176.

² Since the fiscal year to which contributions apply begins one year after the valuation date, the Annual Required Contribution Amount is estimated by assuming payroll will increase 4.0% per year and then applying the Annual Required Contribution Rate computed at the valuation date.

³ JRS is a State appropriated fund. Employer contribution amounts are expected to be paid by the State of Indiana.

SECTION II - FUNDING

G. Unfunded Actuarial Accrued Liability Amortization Schedule ¹

	Date Base Established	Reason	Remaining Unfunded ²	Remaining Period	Amortization Amount
1.	6/30/2009	Actuarial Experience	\$ 37,793,452	23	\$ 3,074,056
2.	6/30/2010	Actuarial Experience and Changes in Actuarial Assumptions	14,613,499	27	\$ 1,115,210
3.	6/30/2011	Actuarial Experience and Changes in Actuarial Assumptions	13,831,521	28	\$ 1,041,905
4.	6/30/2012	Actuarial Experience and Changes in Actuarial Assumptions	12,613,232	29	\$ 938,777
5.	6/30/2013	Actuarial Experience and Changes in Actuarial Assumptions	<u>(6,981,736)</u>	30	<u>\$ (513,883)</u>
	Total		\$ 71,869,968		\$ 5,656,065

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

² In addition to the amortization bases being reduced by the prior year amortization payments, the bases are also reduced pro rata by the contribution of \$90,187,160 made to the Plan pursuant to 2012 HB1376.

SECTION II - FUNDING

H. Approximate Annual Rate of Return for Year Ending June 30, 2013 ¹

	<u>Market Value of Assets</u>	<u>Actuarial Value of Assets</u>
1. Balance, beginning of year	\$ 262,325,682	\$ 260,096,407
2. Balance, end of year	375,752,562	381,239,925
3. Total increase: (2) - (1)	113,426,880	121,143,518
4. Contributions and Transfers In	114,173,927	114,173,927
5. Benefit payments and Transfers Out	17,579,537	17,579,537
6. Net additions: (4) - (5)	96,594,390	96,594,390
7. Net investment increase: (3) - (6)	16,832,490	24,549,128
8. Average assets: [(1) + (2) - (7)] / 2	310,622,877	308,393,602
9. Approximate rate of return: (7) / (8)	5.4%	8.0%

I. Historical Investment Experience

1. <u>Year Ending June 30</u>	2. <u>Actual Rate of Investment Return</u>		3. <u>Actuarial Assumed</u>
	<u>Market Basis ²</u>	<u>Actuarial Basis ¹</u>	<u>Interest Rate</u>
2004	16.3%	3.3%	7.25%
2005	9.8%	7.0%	7.25%
2006	10.7%	15.1%	7.25%
2007	18.2%	15.8%	7.25%
2008	(7.6%)	8.3%	7.25%
2009	(20.6%)	(1.0%)	7.25%
2010	13.9%	(1.7%)	7.25%
2011	20.1%	(0.6%)	7.0%
2012	0.7%	2.6%	7.0%
2013	6.0%	8.0%	6.75%

¹ Based on individual fund experience. Net of expenses and assuming cash flows occur at mid-year.

² INPRS actual rate of return net of fees (2012-2013), 2004-2011 PERF CRIF rate of return reported as Gross of fees.

SECTION II - FUNDING

K. Interest Rate Sensitivity

The investment return assumption (discount rate), as required by GASB, should be based on an estimated long-term investment yield for the plan, with consideration given to the nature and mix of current and expected plan investments. Management and the Board continually monitor the investment rate of return assumption and the Board formally reviews the assumption and makes changes as appropriate. The Board last changed the assumption for the June 30, 2013 valuation from 7.0% to 6.75%.

To illustrate the importance of the investment rate of return, which is used to discount the actuarial liabilities of the Plan, the Funded Ratio and Employer Contributions (for the fiscal year beginning July 1, 2014) are shown below at 6.75% (the current assumption), 6.0% (a three-fourths of a percent decrease), 6.5% (a one-fourth of a percent decrease), 7.5% (a three-fourths of a percent increase), and 8.0% (a one and one-fourth of a percent increase).

	0.75% Decrease: (6.0%)	0.25% Decrease: (6.5%)	Current Assumption: (6.75%)	0.75% Increase: (7.5%)	1.25% Increase: (8.0%)
<u>Funded Status</u>					
Actuarial Accrued Liability	\$ 493,990,763	\$ 466,131,364	\$ 453,109,893	\$ 417,300,465	\$ 395,862,378
Actuarial Value of Assets	<u>381,239,925</u>	<u>381,239,925</u>	<u>381,239,925</u>	<u>381,239,925</u>	<u>381,239,925</u>
Unfunded Actuarial Accrued Liability	\$ 112,750,838	\$ 84,891,439	\$ 71,869,968	\$ 36,060,540	\$ 14,622,453
Funded Ratio	77.2%	81.8%	84.1%	91.4%	96.3%
<u>Annual Required Contribution Rate</u>					
Normal Cost Percentage	37.75%	34.20%	32.58%	28.28%	25.81%
UAAL Amortization Percentage	17.28%	13.79%	12.04%	6.78%	3.27%
Expected Employee Contribution Percentage	<u>5.79%</u>	<u>5.79%</u>	<u>5.79%</u>	<u>5.79%</u>	<u>5.79%</u>
Annual Required Contribution Percentage	49.24%	42.20%	38.83%	29.27%	23.29%

SECTION III - ACCOUNTING

ACCOUNTING

	<u>Page</u>
A. Assumptions and Methods Under GASB #25 and #27	16
B. Membership Data	16
C. Statement of Fiduciary Net Position	17
D. Statement of Changes in Fiduciary Net Position	18
E. Schedule of Funding Progress	19
F. Schedule of Employer Contributions	19
G. Development of Net Pension Obligation (NPO)	20
H. Three-Year Trend Information	20
I. Solvency Test	21

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27

A. Assumptions and Methods Under GASB #25 and #27

Under the Governmental Accounting Standards Board (GASB) Statements No. 25 and No. 27, as amended by GASB No. 50, certain information about the plan is required to be disclosed. The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	June 30, 2013
Actuarial Cost Method	Entry Age Normal (Level Percent of Payroll)
Amortization Method	Level Dollar
Amortization Period	30 Years, Closed
Actuarial Value of Assets	4-Year Smoothed Market Value with 20% Corridor
Actuarial Assumptions:	
Investment Rate of Return	6.75%
Future Salary Increases	4.0% (includes 3.0% wage inflation)
Cost-of-Living Increases	4.0% (tied to salary scale)

B. Membership Data

The plan consisted of the following membership as of June 30, 2013, the date of the latest actuarial valuation:

Retired members, beneficiaries and disabled members receiving benefits:	321
Terminated vested plan members entitled to but not yet receiving benefits:	67
Terminated non-vested plan members entitled to a distribution of contributions:	32
Active Plan Members:	<u>365</u>
Total membership:	785

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

C. Statement of Fiduciary Net Position

1. Assets		
a. Cash	\$	13,388
b. Receivables		
i. Contributions Receivable	\$	100
ii. Miscellaneous Receivables		50,019
iii. Investments Receivable		39,606,002
iv. Interest and Dividends		1,190,052
v. Due From Other Funds		4,877
vi. Total Receivables: (1)(b)(i) + (1)(b)(ii) + (1)(b)(iii) + (1)(b)(iv) + (1)(b)(v)	\$	40,851,050
c. Total Investments		403,338,500
d. Net Capital Assets		13,278
e. Total Assets: (1)(a) + (1)(b)(vi) + (1)(c) + (1)(d)	\$	444,216,216
2. Liabilities		
a. Accounts Payable	\$	2,505
b. Retirement Benefits Payable		9,873
c. Salaries and Benefits Payable		-
d. Investments Payable		46,561,508
e. Securities Lending Obligations		18,845,627
f. Securities Sold Under Agreement to Repurchase		3,017,677
g. Due To Other Funds		26,464
h. Total Liabilities: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f) + (2)(g)	\$	68,463,654
3. Net Position Restricted for Pension Benefits: (1)(e) - (2)(h)	\$	375,752,562

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

D. Statement of Changes in Fiduciary Net Position

1. Net Position as of June 30, 2012	\$	262,325,682
2. Revenue (Additions)		
a. Contributions		
i. Member Contributions	\$	2,631,374
ii. Employer Contributions		111,417,613
iii. Other Contributions		-
iv. Total Contributions: (2)(a)(i) + (2)(a)(ii) + (2)(a)(iii)	\$	114,048,987
b. Investment Income/Loss		
i. Investment Income/Loss	\$	18,885,096
ii. Securities Lending Income		94,198
iii. Securities Lending Expenses		(14,116)
iv. Other Investment Expenses		(2,006,828)
v. Net Investment Income: (2)(b)(i) + (2)(b)(ii) + (2)(b)(iii) + (2)(b)(iv)	\$	16,958,350
c. Other Additions		
i. Interfund Transfers	\$	120,134
ii. Miscellaneous Income		4,806
iii. Total Other Additions: (2)(c)(i) + 2(c)(ii)	\$	124,940
d. Total Revenue (Additions): (2)(a)(iv) + (2)(b)(v) + (2)(c)(iii)	\$	131,132,277
3. Expenses (Deductions)		
a. Pension and Disability Benefits	\$	17,526,495
b. Death, Survivor, and Funeral Benefits		-
c. Distributions of Contributions and Interest		53,042
d. Interfund Transfers		-
e. Pensions Relief Distributions		-
f. Local Unit Withdrawals		-
g. Administrative and Project Expenses		125,860
h. Total Expenses (Deductions): (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e) + (3)(f) + (3)(g)	\$	17,705,397
4. Changes in Net Position Restricted for Pension Benefits: (2)(d) - (3)(h)	\$	113,426,880
5. Net Position as of June 30, 2013: (1) + (4)	\$	375,752,562

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

E. Schedule of Funding Progress¹

1. Actuarial Valuation Date June 30	2. Actuarial Value of Assets	3. Actuarial Accrued Liability (AAL)	4. Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	5. AAL Funded Ratio (2) / (3)	6. Current Payroll	7. UAAL as a % of Payroll (4) / (6)
2007	\$ 211,746,513	\$ 283,995,165	\$ 72,248,652	74.6%	\$ 29,712,252	243.2%
2008	234,880,522	338,748,983	103,868,461	69.3%	33,729,411	307.9%
2009	240,953,881	330,551,207	89,597,326	72.9%	36,195,775	247.5%
2010	242,142,843	364,122,731	121,979,888	66.5%	36,721,919	332.2%
2011	248,623,357	400,273,544	151,650,187	62.1%	45,764,278	331.4%
2012	260,096,407	437,854,459	177,758,052	59.4%	45,138,370	393.8%
2013	381,239,925	453,109,893	71,869,968	84.1%	46,966,598	153.0%

F. Schedule of Employer Contributions¹

1. Year Ending June 30	2. Annual Required Contribution (ARC)	3. Actual Employer Contribution	4. % of ARC (3) / (2)
2007	\$ 12,249,490	\$ 14,661,552	119.7%
2008	10,028,371	15,920,268	158.8%
2009	16,131,121	20,861,106	129.3%
2010	16,076,869	18,630,651	115.9%
2011	18,909,921	19,199,927	101.5%
2012	19,664,441	18,896,172	96.1%
2013	25,458,485	111,417,613	437.6%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

G. Development of Net Pension Obligation (NPO)

1. Year Ending June 30	2. Annual Required Contribution (ARC)	3. Interest on NPO at Discount Rate	4. ARC Adjustment (9) / (5)	5. Amortization Factor	6. Net Pension Cost (NPC) (2) + (3) - (4)	7. Actual Employer Contribution	8. Change in NPO (6) - (7)	9. NPO at Beginning of Year	10. NPO at End of Year (8) + (9)
2011	\$ 18,909,921	\$ (1,961,250)	\$ (2,257,866)	12.4090	\$ 19,206,537	\$ 19,199,927	\$ 6,610	\$ (28,017,866)	\$ (28,011,256)
2012	19,664,441	(1,960,788)	(2,257,334)	12.4090	19,960,987	18,896,172	1,064,815	(28,011,256)	(26,946,441)
2013	25,458,485	(1,818,885)	(2,117,232)	12.7272	25,756,832	111,417,613	(85,660,781)	(26,946,441)	(112,607,222)

H. Three-Year Trend Information

1. Year Ending June 30	2. Net Pension Cost (NPC)	3. Actual Employer Contribution	4. % of NPC (3) / (2)
2011	\$ 19,206,537	\$ 19,199,927	100.0%
2012	19,960,987	18,896,172	94.7%
2013	25,756,832	111,417,613	432.6%

SECTION III - ACCOUNTING

I. Solvency Test¹

Portion of Actuarial Liability Provided by Assets
(\$ in Thousands)

1. As of June 30	2. Member Contribution Balances	3. Retired and Beneficiaries	4. Non-Retired Members (Employer Financed Portion)	5. Total Actuarial Accrued Liabilities	6. Actuarial Value of Assets
2007	21,276,000 100.0%	143,645,324 100.0%	119,073,841 39.3%	283,995,165 74.6%	211,746,513
2008	22,243,000 100.0%	155,177,081 100.0%	161,328,902 35.6%	338,748,983 69.3%	234,880,522
2009	21,649,000 100.0%	170,962,026 100.0%	137,940,181 35.0%	330,551,207 72.9%	240,953,881
2010	23,137,615 100.0%	182,023,263 100.0%	158,961,853 23.3%	364,122,731 66.5%	242,142,843
2011	24,359,001 100.0%	198,796,748 100.0%	177,117,795 14.4%	400,273,544 62.1%	248,623,357
2012	27,699,555 100.0%	205,340,787 100.0%	204,814,117 13.2%	437,854,459 59.4%	260,096,407
2013	29,060,096 100.0%	224,131,485 100.0%	199,918,312 64.1%	453,109,893 84.1%	381,239,925

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION IV - CENSUS DATA

CENSUS DATA

	<u>Page</u>
A. Reconciliation of Participant Data	22
B. Census Information as of June 30, 2013	23
C. Schedule of Active Member Valuation Data	24
D. Schedule of Retirees, Beneficiaries, and Disabled Members	25
E. Distribution of Active Members by Age and Service	26
F. Distribution of Inactive Vested Members by Age and Service	27
G. Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired	28
H. Schedule of Benefit Recipients by Type of Benefit Option	29
I. Schedule of Average Benefit Payments as of June 30, 2013	30

SECTION IV - CENSUS DATA

A. Reconciliation of Participant Data

	Actives	Inactive Non-Vested With Member Contribution Balance	Inactive Vested	Disabled	Retired	Beneficiary	Total
PwC Total as of June 30, 2012	361	28	72	3	210	98	772
New Entrants	30	-	-	-	-	-	30
Rehires	2	-	(2)	-	-	-	-
Non-Vested Terminations	(5)	5	-	-	-	-	-
Vested Terminations	(6)	-	6	-	-	-	-
Retirements	(15)	-	(9)	-	24	-	-
Disablements	-	-	-	-	-	-	-
Death with Beneficiary	-	-	-	(1)	(10)	11	-
Death without Beneficiary	-	-	-	-	(3)	(11)	(14)
Refunds	(2)	(1)	-	-	-	-	(3)
Data Adjustments	-	-	-	-	-	-	-
Total as of June 30, 2013	365	32	67	2	221	98	785

SECTION IV - CENSUS DATA

B. Census Information as of June 30, 2013

	<u>Male</u>	<u>Female</u>	<u>Total</u>
1. Active			
a. Number	260	105	365
b. Average Age	55.2	53.2	54.6
c. Average Years of Service	9.3	7.6	8.8
d. Covered Payroll of Actives	\$ 33,808,552	\$ 13,158,046	\$ 46,966,598
2. Inactive - Vested			
a. Number	54	13	67
b. Average Age	63.0	56.1	61.7
c. Average Years of Service	19.3	14.9	18.5
3. Inactive - Non-Vested ¹			
a. Number	27	5	32
4. Retiree/Beneficiary/Disabled			
a. Number	200	121	321
b. Average Age	73.0	78.7	75.2
c. Annual Benefits Payable	\$ 14,273,191	\$ 4,200,823	\$ 18,474,014

¹ For June 30, 2013, inactive non-vested members entitled to a refund of their member contributions totaling \$590,200.

SECTION IV - CENSUS DATA

C. Schedule of Active Member Valuation Data ¹

1. As of June 30	2. Active Members	3. Annual Payroll (\$ in Thousands)	4. Average Pay (3) / (2)	5. Annual Percent Increase
2005	282	\$ 32,231	\$ 114,293	22.3%
2006	274	34,065	124,323	8.8%
2007	258	29,712	115,164	(7.4%)
2008	267	33,729	126,327	9.7%
2009	288	36,196	125,680	(0.5%)
2010	291	36,722	126,192	0.4%
2011	363	45,764	126,072	(0.1%)
2012	361	45,138	125,037	(0.8%)
2013	365	46,967	128,676	2.9%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION IV - CENSUS DATA

D. Schedule of Retirees, Beneficiaries, and Disabled Members ¹

1.	2. Added		3. Annual		4. Removed		5. Annual		6. End of Year ²		7.	8.	9.
Year Ending June 30	Number	(\$ in Thousands)	Number	(\$ in Thousands)	Number	(\$ in Thousands)	Number	(\$ in Thousands)	Number	(\$ in Thousands)	% Change in Annual Allowances	Average Annual Allowances	
2005	13	\$ 667	11	\$ 374	264	\$ 12,272	264	\$ 12,272	264	\$ 12,272	24.5%	\$ 46,485	
2006	12	868	7	474	269	12,983	269	12,983	269	12,983	5.8%	48,266	
2007	18	976	8	409	279	13,899	279	13,899	279	13,899	7.1%	49,819	
2008	23	1,257	26	991	276	14,754	276	14,754	276	14,754	6.1%	53,455	
2009	74	3,744	57	1,835	293	15,230	293	15,230	293	15,230	3.2%	51,978	
2010	11	627	6	339	298	15,390	298	15,390	298	15,390	1.1%	51,644	
2011	21	1,452	9	200	310	16,787	310	16,787	310	16,787	9.1%	54,152	
2012	7	444	6	194	311	17,028	311	17,028	311	17,028	1.4%	54,751	
2013	24	1,798	14	442	321	18,474	321	18,474	321	18,474	8.5%	57,551	

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

² End of year annual allowances are not equal to the prior end of year annual allowances plus addition and less removals because of reductions for beneficiary benefits, data changes, and cost-of-living increases.

SECTION IV - CENSUS DATA

E. Distribution of Active Members by Age and Service

Attained Age	Distribution of Active Members by Age and Service as of June 30, 2013										
	Under 1 year	1 to 4 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	Over 40 years	Total
<25											
25-29											
30-34	2		1								3
35-39	2	9	4								15
40-44	6	20	7	4							37
45-49	6	21	14	7	2						50
50-54	4	20	13	20	3						60
55-59	6	19	19	16	19	9					88
60-64		11	17	15	12	7					62
65-69		8	6	12	10	8					44
70&Up			1	4		1					6
Total	26	108	82	78	46	25					365

SECTION IV - CENSUS DATA

F. Distribution of Inactive Vested Members by Age and Service

Attained Age	Distribution of Inactive Vested Members by Age and Service as of June 30, 2013							Total
	Under 5 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	
<25								
25-29								
30-34								
35-39								
40-44								
45-49			1		1			2
50-54		1	5	1				7
55-59		1	4	1	10			16
60-64		2	4	5	8			19
65-69			1	1	13			15
70&Up					8			8
Total		4	15	8	40			67

SECTION IV - CENSUS DATA

G. Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired ¹

Attained Age	Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired as of June 30, 2013							Total
	Under 5 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	
<40								
40-44								
45-49								
50-54								
55-59	2	1		1			1	5
60-64	20	2						22
65-69	56	18	4	1	1	1	1	82
70-74	18	20	20	2	2		1	63
75-79	4	4	28	15	1	4	1	57
80-84		3	8	19	11	5	4	50
85-89		1	2	3	9	3	5	23
90&Up				1	3	5	10	19
Total	100	49	62	42	27	18	23	321

¹ Six of the members do not have a date of retirement. For these members we assumed they retired at the earlier of June 30, 2013 and 65.

SECTION IV - CENSUS DATA

H. Schedule of Benefit Recipients by Type of Benefit Option

1977 System						
Number of Benefit Recipients by Benefit Option as of June 30, 2013						
Amount of Monthly Benefit	Retiree Single Life Annuity	Retiree 50% Joint and Survivor Annuity	Survivors	Disabled	Total	
\$ 1 - 500	0	0	0	0	0	
501 - 1,000	0	0	0	0	0	
1,001 - 1,500	0	0	28	0	28	
1,501 - 2,000	0	0	10	0	10	
2,001 - 3,000	3	7	25	0	35	
over 3,000	12	125	16	0	153	
Total	15	132	79	0	226	

1985 System						
Number of Benefit Recipients by Benefit Option as of June 30, 2013						
Amount of Monthly Benefit	Retiree Single Life Annuity	Retiree 50% Joint and Survivor Annuity	Survivors	Disabled	Total	
\$ 1 - 500	0	0	0	0	0	
501 - 1,000	0	0	0	0	0	
1,001 - 1,500	0	0	4	0	4	
1,501 - 2,000	0	1	3	0	4	
2,001 - 3,000	0	1	8	0	9	
over 3,000	4	68	4	2	78	
Total	4	70	19	2	95	

SECTION IV - CENSUS DATA

I. Schedule of Average Benefit Payments as of June 30, 2013 ¹

1977 Plan									
	Years of Credited Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
Average Monthly Defined Benefit	\$ 2,731	\$ 2,308	\$ 4,123	\$ 4,718	\$ 5,340	\$ 6,780	\$ 6,538	\$ 4,684	
Average Final Average Salary	\$ 97,749	\$ 104,482	\$ 117,268	\$ 109,347	\$ 111,517	\$ 111,708	\$ 122,579	\$ 112,457	
Number of Benefit Recipients	45	15	32	30	50	31	23	226	

1985 Plan									
	Years of Credited Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
Average Monthly Defined Benefit	\$ 5,813	\$ 3,163	\$ 4,059	\$ 5,606	\$ 6,395	\$ 4,032	\$ 6,706	\$ 5,063	
Average Final Average Salary	\$ 130,798	\$ 106,483	\$ 110,912	\$ 120,148	\$ 128,389	\$ -	\$ -	\$ 120,661	
Number of Benefit Recipients	24	4	34	17	12	3	1	95	

¹ For some members average salary at retirement and years of credited service was not available. The average salary for each group excludes these members. Members with credited service information that is missing are counted in the "0-4" group.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

ACTUARIAL ASSUMPTIONS AND METHODS

	<u>Page</u>
A. Actuarial Assumptions	31
B. Actuarial Methods	34

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

The assumptions used in the valuation were selected and approved by the INPRS Board of Trustees. The demographic assumptions are reviewed every five years through a study of actual experience. In this way, the actuary provides guidance to the Board in selecting the assumptions. The actuary and other economic and investment professionals also provide advice to the Board for selecting the economic assumptions. In our opinion, the assumptions are reasonable for purposes of this valuation.

Interest Rate / Investment Return	6.75% (net of administrative and investment expenses)
Interest on Member Balances	3.5% per year
Future Salary Increases	4.0% per year
Inflation	3.0% per year
Cost of Living Increases	4.0% per year in deferral and retirement
Mortality (Healthy and Disabled)	2013 IRS Static Mortality projected five (5) years with Scale AA
Disability	1964 OASDI Table. Illustrative rates shown below:

<u>Age</u>	<u>Rate</u>
20	0.060%
25	0.085%
30	0.110%
35	0.147%
40	0.220%
45	0.360%
50	0.606%
55	1.009%
60	1.627%
65+	0.000%

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions (continued)

Termination

Based on 2005-2010 experience. Rates shown below:

<u>Age</u>	<u>Rate</u>
20-37	4%
38-65	7%
66+	4%

Retirement

Based on 2005-2010 experience. Rates shown below:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
55-61	20%	65	50%
62	25%	66-74	30%
63	15%	75+	100%
64	10%		

Decrement Timing

Decrements are assumed to occur at the beginning of the year.

Spouse/Beneficiary

90% of members are assumed to be married or to have a dependent beneficiary. Male members are assumed to be four (4) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.

Data Assumptions

Actives and inactives with no date of birth and/or no gender are assumed to be age 57 and/or male. Spouse gender is assumed to be the opposite gender of the member.

Retirees and disabled members with an unknown marital status are assumed to be married. Retirees and disabled members that are not married are assumed to be receiving a single life annuity. Retirees and disabled members that are married are assumed to elect a 50% joint and survivor annuity.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions (continued)

Changes in Assumptions

For the June 30, 2013 valuation, the Board approved the following assumption changes:

- The interest crediting rate assumption on member contribution balances was increased from 0% to 3.5%.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

The actuarial methods used in this valuation were selected and approved by the Board. In general, the methods provide orderly funding of all benefits being accrued, as well as unfunded past-service benefit liabilities, over a period of thirty years. However, the smoothing method employed in determining the Actuarial Value of Assets may accelerate or lengthen the effective funding period, depending on whether gains or losses are experienced. In our opinion, the actuarial methods are reasonable for the purposes of this valuation.

1. Actuarial Cost Method

The actuarial cost method is Entry Age Normal - Level Percent of Payroll.

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

Gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 30-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 30-year period. The purpose of the method is to give a smooth progression of the costs from year to year and, at the same time, provide for an orderly funding of the unfunded liabilities.

2. Asset Valuation Method

Actuarial Value of Assets is equal to a four-year smoothing of gains and losses on the Market Value of Assets, subject to a 20% corridor.

3. State Appropriations

Based on the assumptions and methods previously described, an Actuarially Calculated Amount is computed. The Board considers this information when requesting funds from the State.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods (continued)

4. Anticipated Payroll

The Anticipated Payroll of \$46,966,598 for the fiscal year beginning July 1, 2013 is equal to the actual payroll during the prior year for members who are still active on the valuation date of \$45,684,619, adjusted for one year of salary increases, which we understand to be 3.1% effective July 1, 2013. The Anticipated Payroll does not include amounts for members who have reached the age at which retirement is assumed to occur immediately. The Anticipated Payroll of \$48,845,262 for the fiscal year beginning July 1, 2014 includes an additional year of assumed 4.0% salary increases.

5. Changes in Actuarial Methods

There have been no changes in the actuarial methods since the June 30, 2012 valuation.

SECTION VI - SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

Page

Summary of Plan Provisions

36

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions

The benefit provisions for the JRS are set forth in IC 33-38-6, 33-38-7, and 33-38-8. A summary of those defined pension benefit provisions is presented below:

Participation All individuals serving as a judge or justice in Indiana as defined in IC 33-38-6-7. A judge who begins service before September 1, 1985 shall be a participant of the 1977 System (IC 33-38-7) and a judge who begins service after August 31, 1985 shall be a participant of the 1985 System (IC 33-38-8).

Eligibility for Defined Pension Benefits

- a. Normal Retirement Earliest of:
 - Age 65 with 8 or more years of creditable service
 - Age 55 with sum of age and creditable service equal to 85 or more

- b. Early Retirement Age 62 with 8 or more years of creditable service

- c. Late Retirement Subject to continued employment after normal retirement

- d. Disability Retirement A participant is considered disabled if two (2) physicians certify that the participant is totally incapacitated from earning a livelihood and that the condition is likely to be permanent

- e. Termination 8 or more years of creditable service and no longer active (i.e. vested inactive)

- f. Pre-Retirement Death 8 or more years of creditable service entitled to a future benefit

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions (continued)

Amount of Benefits

- a. Normal Retirement The normal retirement benefit is a monthly annuity payable for life with a 50% continuation (or \$12,000 annually, if greater) to a surviving spouse or surviving dependent children. The benefit is equal to a percentage of earnings¹ in accordance with the following table:

<u>Years of Service</u>	<u>Percentage</u>
7 or less	0%
8	24%
9	27%
10	30%
11	33%
12	50%
13	51%
14	52%
15	53%
16	54%
17	55%
18	56%
19	57%
20	58%
21	59%
22 or more	60%

An additional percentage shall be calculated by prorating between applicable percentages, based on the number of months in a partial year of service.

¹ Earnings is the annual salary being paid for the office which the participant held at the time of separation from service.

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions (continued)

Amount of Benefits (continued)

- b. Early Retirement The early retirement benefit is the accrued retirement benefit determined as of the early retirement date and payable commencing at the normal retirement date. A participant may elect to have the benefit commence prior to age 65 provided the benefit is reduced by 0.1% for each month that the benefit commencement date precedes age 65.

- c. Late Retirement The late retirement benefit is calculated in the same manner as the normal retirement benefit. Creditable service and earnings earned after normal retirement is included in the computation.

- d. Disability Retirement The disability retirement benefit is payable for the duration of the disability commencing the month following disability date with reduction for early commencement. The amount of monthly benefit shall be equal to a percentage of average monthly earnings in accordance with the following table:

Years of Service	Percentage
12 or less	50%
13	51%
14	52%
15	53%
16	54%
17	55%
18	56%
19	57%
20	58%
21	59%
22 or more	60%

An additional percentage shall be calculated by prorating between applicable percentages, based on the number of months in a partial year of service.

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions (continued)

Amount of Benefits (continued)

- e. Termination The termination benefit is the accrued retirement benefit determined as of the termination date and payable commencing as of the normal retirement date. The participant may elect to receive a reduced early retirement benefit.

- f. Death Benefit If death occurs (a) while receiving benefits, (b) while in service as a judge with 8 or more years of service, or (c) while permanently disabled, the spouse or family of dependent children shall be eligible for a benefit equal to the greater of \$12,000 (effective July 1, 1977) annually or 50% of the benefit the participant was receiving or was entitled to receive at the time of death.

Spousal benefits are payable as a lifetime monthly pension.

- g. Post-Retirement Benefit Increases Participant benefits in the Judges 1977 Retirement, Disability, and Death System increase in the same ratio as the salary being paid for the office a participant held at the time of separation from service increases. Effective January 1, 2010, the Judges 1985 Retirement, Disability, and Death System will also have benefits increase in the same manner, on a prospective basis only.

Member Contributions

Each participant contributes 6% of his total salary until completion of 22 years of service.

Forms of Payment

- a. Single Life Annuity Member will receive a monthly benefit for life, but there are no monthly payments to anyone after death.

- b. Joint with One-Half Survivor Benefits Member will be paid a monthly benefit for life. After death, one-half (1/2) of the benefit will be paid to the spouse for their lifetime or the dependent until age 18 unless disabled. If the dependent child was named the beneficiary, once they are no longer entitled to the benefit, the spouse would receive the benefit for life.

SECTION VI - SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions (continued)

Withdrawal from Fund	If member's employment is terminated prior to eligibility for a retirement annuity, the member may withdraw their contributions from the Fund.
Cost-of-Living Adjustments	Benefits for retired members increase automatically based on the annual pay increase granted for the position the member held at the time of retirement. The annual cost-of-living assumption for the valuation is 4.0%, which is the same as the salary increase assumption for active members.
Changes in Provisions	No changes since prior valuation.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms

Page

Definitions of Technical Terms

41

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms

Actual Rate	For valuations prior to June 30, 2011, the contribution rate expressed as a percentage of covered payroll on an annual basis (not less than 0.0%) that is the result of applying applicable smoothing rules to the prior year Actual Rate and current year Actuarially Calculated Rate. Beginning with the June 30, 2011 valuation, the Board resolved to discontinue use of the smoothing rules for establishing contribution rates/amounts.
Actuarial Accrued Liability (AAL)	That portion, as determined by a particular Actuarial Cost Method, of the Present Value of Future Benefits (PVFB) and expenses which is not provided for by future Normal Costs. Generally this means the portion of the PVFB attributable to past service.
Actuarial Assumptions	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided pension benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.
Actuarial Cost Method	A procedure for determining an actuarially equivalent allocation of the Present Value of Future Benefits to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.
Actuarially Equivalent	A method of making the actuarial present value of two series of payments equal as of a given date using the same assumptions.
Actuarial Gain/(Loss)	The difference between actual unfunded Actuarial Accrued Liability and anticipated unfunded Actuarial Accrued Liability – during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.
Actuarial Present Value	The single amount now that is equal to a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms (continued)

Actuarial Valuation Date	The date as of which an actuarial valuation is performed.
Actuarially Calculated Rate	The precise actuarial contribution rate expressed as a percentage of covered payroll that is determined by summing the Normal Cost and amortization of unfunded Actuarial Accrued Liability and dividing by anticipated payroll.
Amortization	The payment of a present value financial obligation on an installment basis over a future number of years.
Annual Required Contribution of the Employer (ARC)	The employer's periodic required contributions to a defined benefit pension plan, calculated in accordance with the plan provisions, actuarial assumptions, actuarial cost method and other actuarial method prescribed by Governmental Accounting Standards No. 25 and No. 27.
Creditable Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Funding Policy	The program for the amounts and timing of contributions to be made by plan members, employer, and other contributing entities (for example, state government contributions to a local government plan) to provide the benefits specified by a pension plan.
Level Dollar Amortization Method	The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as a result of inflation, level dollar payments generally represent a decreasing percentage of payroll; in dollars adjusted for inflation, the payments can be expected to decrease over time.
Normal Cost (NC)	That portion of the present value of future benefits which is allocated to a valuation year by the Actuarial Cost Method. The normal cost is specific to the cost method used.
Plan Assets	Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer(s) or plan administrator, for the payment of benefits in accordance with the terms of the plan.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms (continued)

Plan Members

The individuals covered by the terms of a pension plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.

Present Value of Future Benefits (PVFB)

Projected benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members upon retirement) as a result of their service through the valuation date and their expected future service. The actuarial present value of projected future benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment (taking into account mortality, turnover, probability of participating in plan retirement, etc.). Alternatively, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay the projected benefits when due.